

What is claimed is:

1. A moving object detection apparatus in which an oscillating output, from a gate of an FET functioning as an oscillator, is coupled via a resonant line to a
5 transmit-receive antenna, a wave, transmitted from said antenna and returned as a reflected wave, is received at said gate, and a beat signal component output from said gate due to a phase difference between said transmitted wave and said reflected wave is taken as a moving object
10 detection signal.

2. A moving object detection apparatus as claimed in claim 1, wherein said FET and said resonant line are formed on a multilayer board and housed in a cavity resonator, and said antenna is provided on an underside
15 of said multilayer board and slot-coupled to said resonant line by a triplate structure.

3. A moving object detection apparatus as claimed in claim 1, wherein said FET is a GaAs FET or a heterojunction FET.

20 4. A moving object detection apparatus as claimed in claim 2, wherein said FET is a GaAs FET or a heterojunction FET.